

REMARKS/ARGUMENTS

Claims 1 - 38 are currently pending in this application. Claims 1-34 have been rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6,363,060 to Sarkar (hereafter "Sarkar"). Claim 35 is rejected under 35 U.S.C. 103 as being unpatentable over Sarkar in view of U.S. Patent No. 6,246,673 to Tiedemann et al. (hereafter "Tiedemann"). Claims 36-38 are rejected under the second paragraph of 35 U.S.C. 112 for insufficient antecedent basis.

With respect to claim 1, claim 1 recites a transmitted power level of the PSC and the midamble code being at a common fixed ratio for each base station. The Examiner asserts that Sarkar teaches a scheme of transmission of a PSC and the midamble code at a common fixed ratio for each base station. The Applicants respectfully disagree. The portion in Sarkar cited by the Examiner reads as follows:

Since the PSC and SSC signals are transmitted during the same 256-chip part of each frame, each is transmitted at half the power of the signals in the other parts. ... Though this makes PSC and SSC detection more difficult, it keeps the transmission signal power constant throughout each frame. (See column 1 lines 53-61).

Sarkar does not teach a scheme of transmitting a PSC and a midamble code at a common fixed ratio. The above cited portion discloses that since both the PSC and the SSC are transmitted on top of each other during the first 256 chips of each time

slot, the power level of the PSC and the SSC, respectively, are set to half the power of the remaining portion of each time slot so that the power level during the first 256 chips of each time slot is set to equal to the power level of the remaining portion of the time slot. The above cited portion is for maintaining a power level constant during one time slot. Sarkar fails to disclose a scheme of setting the power level of the PSC and a midamble to a fixed ratio.

The problem solved by the present invention is that a UE has to monitor the broadcast channel to find midambles with the highest received power for synchronization in the synchronization of step 3. The present invention simplifies step 3 by setting the power level of the PSC and the midamble at a fixed ratio for each base station. Since the power ratio of the PSC and the midamble code is fixed, the UE does not have to search the midamble with the highest received power, but may synchronize with a base station based on the detected PSC with the highest power. Sarkar neither discloses nor teaches this scheme. Therefore, claim 1 is not anticipated by Sarkar.

With respect to claims 5, 9, 12, 17, 21, 26, 31 and 35, all of these claims recite the limitation, transmission of the PSC and the midamble code at a common fixed ratio for each base station, which is not disclosed by Sarkar. Therefore, claims 5, 9, 12, 17, 21, 26 and 35 are also clearly distinguishable from Sarkar for the same

reasons stated above with respect to claim 1. The rejection of claim 31 is moot in view of claim 31 being canceled pursuant to the foregoing amendment.

With respect to claims 2-4, 6-8, 10-11, 13-16, 18-20, 22-25, 27-30, and 36-38, these claims are dependent claims of claims 5, 9, 12, 17, 21, 26, and 35, respectively. Therefore, it is believed that these dependent claims are also allowable for the same reasons stated above. The rejection of claims 32-34 is moot in view of claims 32-34 being canceled pursuant to the foregoing amendment.

With respect to claims 36-38, claims 36 and 38 have been amended to cure the lack of antecedent basis. Therefore, it is respectfully submitted that the rejection of claims 36-38 is overcome by the foregoing claim amendments.

Withdrawal of the currently standing rejections is respectfully submitted.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

Applicant: Dick et al.
Application No.: 09/923,263

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Dick et al.

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